

## The effect of forensic evidence in revealing the truth about murders according to Algerian legislation

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### **Abstract:**

This study mainly aims to search for forensic medicine's role in influencing criminal judges' opinions. The current topic combines two sciences. Legal sciences aim through criminal procedures to reach the truth. In many cases, the judiciary can only reach the truth with the help of a forensic expert. Moreover, his opinion shall be decisive and influential in adjudicating the lawsuit.

In front of the contradiction between the two sciences, the forensic doctor did not study the lawsuit and its procedures. The criminal judge did not study medical sciences and how to reveal medical evidence, especially in murder crimes, so it was necessary to search the extent of the obligatory opinion of the forensic expert in influencing criminal rulings in murder crimes.

**Keywords:** forensic; medicine; expert; criminal; judge.

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## . INTRODUCTION

Evidence is defined as everything that its knowledge requires knowledge of something else, and since criminal law is the means used by the judge to reach the truth of the facts presented to him in order to implement the rule of law in them and to reach this truth, it is necessary to seek the help of specific evidence, so this evidence is classified into moral evidence and other material.

The strength of a case depends on both the physical evidence, such as DNA or fingerprints, and the moral evidence, which is extracted from the statements of people and derived from the testimony of witnesses, the verbal clarifications of experts, the confession of the suspect, the statements of the victim, and the statement and testimony of the informants. It is indirect evidence subject to interpretation and explanation, emanating from a human whose characteristics are forgetfulness and misjudgment, which makes trust in it not equal to its counterparts of physical evidence.

The physical evidence is the one that is collected and revealed at the crime scene, such as the tools used, fingerprints, traces of fractures, wounds, blood spots, saliva, genetic fingerprints, and the crime weapon—the cause of the incident. Forensic evidence is included in the physical evidence extracted by the expert, based mainly on three questions: the nature of the incident-the, the cause of the incident-who is the cause?

Moreover, since the forensic doctor is qualified to uncover and access this evidence, especially in murder crimes, if he is not the only one qualified in that matter, the judge cannot be satisfied with verbal statements to decide the case because the accused has the right to lie according to the jurisprudence of the French court, so the question arises about the extent of compulsory medical expertise legitimacy for the criminal judge in detecting murders crimes?

In order to answer this problem, I will rely on the analysis of some legal rules, jurisprudence, jurisprudential opinions, and medical information, dividing the subject into two sections:

In the first, I will explain all the general provisions of forensic medicine, and in the second, I will explain the signs of death and the changing of the corpse according to the doctors' opinion.

## 2. Definition of forensic medicine and explaining its fields

It consists of two terms, medicine and legal. However, the origin of its name is the science of forensic medicine, so the word "science" is often

omitted, and it is considered a bridge between medical scholars and legal scholars (Ahad, 2018).

As for medicine, it is the collection of scientific knowledge and the means used to prevent and treat diseases and wounds that affect humans and their treatment.

The task of medicine was practiced by magicians, clerics, and priests until the fourth century B.C. when the "Hippocrate" developed a protocol between the years 460 and 337 B.C. for practicing the medical profession based on medical questioning and knowledge. Under the Arab-Islamic civilization, we find that "Ibn Sina and Al-Zahrawi" and sciences were known. Medical science has made a qualitative leap thanks to the French doctor "Pasteur," who discovered microbes and reached the causes of diseases.

Then, medicine developed, and its methods developed until it reached specializations such as neurology, eyes, skin, and forensic medicine. So forensic medicine is one of the branches of medical science in general.

As for the word "Sharia," we attributed it to the "Sharia," or the law in its broad sense, and by it, we mean those rules that regulate the relations between people.

Thus, forensic medicine can be defined as a branch of medicine practiced by a forensic doctor assigned to conduct expertise or examinations to assist the criminal or civil judiciary in reaching the truth, and forensic evidence can directly influence the judge's decision (Joseph Peterson, 2006, p. 07).

## 2.1 areas of forensic medicine

Forensic medicine includes many areas, including those related to the study of the criminal and others related to the social, military, and professional aspects, which are:

-Forensic medicine (Joseph Peterson, 2006, p. 08): which studies everything surrounding the criminal and the victim, such as the causes of death, the duration of disability, and the method used.

-Social forensic medicine: presents its techniques for dispute resolution of a social nature, such as occupational disease disputes, and the extent to which they relate to the nature of the activity, the mental health of those who left a will, and the state of quarantine.

-Toxicology and looking for its effect on the body.

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-Mental forensic medicine determines the extent of a person's responsibility and will when committing an act to take the appropriate action.

-General areas and studies of the psychological and physiological factors of criminal behavior, factors of juvenile delinquency, and forensic pathology (Pinheiro, p. 02), it is spread and aggravation.

-Military forensic medicine, which includes examining the military to diagnose the degree of their injury, to determine the percentage of disability, and to refer military employees and their likes to retirement.

-Professional forensic medicine, studying the rules governing the professional path of forensic medicine in recruitment, training, appointment, harnessing, and responsibility.

### **2.2 the definition of forensic medical expertise**

Medical expertise is an act through which a doctor appointed by a judge, authority, or other body provides his technical assistance to assess a person's physical or mental condition and then present the consequences that have criminal or civil effects(The same concept came with Article 95 of Decree 92-276, which includes the Code of Medical Ethics.).Issues whose assessment requires special scientific knowledge to assess a matter of a unique nature that he does not know.

### **2.3 Definition of the forensic expert**

He is the doctor who harnesses his medical knowledge and experience to serve the judiciary and is considered a justice assistant, as he provides information of a technical nature, such as knowing the age of the victim, date of death, cause, and degree of injury, percentage of disability, and others.

If the criminal case requires a technical opinion, the judicial authorities, such as the ruling judge or the investigating judge, whether before the first instance court or the appellate party, may request the opinion of the expert or the doctor, either on their initiative or at the request of the prosecution or one of the litigants(Article 143 of Ordinance No. 66-155 of June 8, 1966, indicates this, containing the Code of Criminal Procedure).

The expert doctor is chosen from the list prepared in advance by the Judicial Council.( Following the procedures outlined in Executive Decree No. 95-310 of 10/10/1995, specifying the conditions and modalities for registration in the lists of judicial experts). The expert only takes the oath sometimes. However, the judge can appoint an expert who is not registered on the list,

but on the condition that he takes the legal oath stipulated in Article 145 of the Code of Criminal Procedures before assigning him the task so that the judiciary guarantees the integrity and not taking any sides.

One of the forensic doctor's most essential functions and tasks is to determine the cause and manner of death (Maio, 2001, p. 03). through autopsy, which means examining the body after death (Hakobyan., 2007). In general, the expert may not deviate from the tasks assigned to him in the assignment decision, and it can be in one of the following areas:

-The field of injuries: by examining wounds, injuries, fractures, burns, the percentage of disability or permanent disabilities, and the effects of beatings, torture, hanging, drowning, and the cause of death.

-Field of public inspections: the doctor is trying to answer the question: Was the incident a criminal cause or not?

-The field of searching for crime evidence: interrogating facts using the means and methods of forensic laboratories with the help of scientific police laboratories with judicial police officers, such as examining blood type or fingerprints.

-Estimating the degree of responsibility: examining the extent of mental integrity and will when committing a crime. The insane person benefits from exemption from punishment, and the judge cannot ascertain whether he is insane except after experimenting.

-Proof of guilt: The role of the medical expert in this point is indirect because that is one of the tasks of the judge, so the expert's opinion remains technical.

## **2.4 Limits of experience**

According to the text of Article 96 of the executive decree specifying the conditions for registration in the lists of judicial experts(Executive Decree No. 95-310 of 10/10/1995 specifies the registration conditions in the judicial experts' lists), the expert doctor and the expert or supervising dental surgeon must refuse to answer questions they deem strange about real medical techniques, which is the same as Article 146 of the Code of Criminal Procedure.

## **3. is the medical certificate and the forensic doctor's report**

They are the two official documents containing the expertise's data and results. We will detail them in the following :

### **3.1 medical certificate**

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It is the written document on which observations of facts of a medical nature and their interpretation are recorded. This certificate is delivered only to the person concerned or his relatives if the condition of the person concerned does not permit that or to qualified agents such as security services or judges and administrations, taking into account professional secrecy.

### **First: the formal controls of the certificate**

It must be legible and inclusive(Article 56 of the Code of Medical Ethics ) And include the following data: The organization the doctor follows, whether it is a laboratory, hospital, or clinic; the doctor's name, surname, description, and address of his workplace; the nature of the certificate, whether it is a health safety certificate, or a cessation of work or surgery, the name, surname, age, and address of the beneficiary certificate, statement of assignment or harness, date, stamp, and handwritten signature.

### **Second: Types of medical certificates**

-A medical certificate for examining wounds and beatings: The medical certificate includes a set of essential data, such as the identity of the doctor who compiled it, the name, surname, address, and date of birth of the person concerned, with a record of the victim's statements, the circumstances and place of the victim's examination, with an accurate description of the current injuries and subsequent complications.in addition to estimating the number of days of disability and indicating the reason for handing over the certificate, shall be drawn up in duplicate and stamped and signed. The medical certificate is vital in determining the description of the crime for public prosecution, whether it is a misdemeanor, a felony, or a violation.

-The medical certificate for childbirth: attesting that the doctor attended the birth, indicating whether the newborn was alive or dead, male or female.

-A medical certificate for a death examination: The death certificate proves the death of the person according to which the deceased is buried. In the case of a suspicious death, the certificate is presented to the public prosecutor, who issues a burial permit if he deems there is no need for an autopsy.

-Medical certificate of mental illness: The governor and the Attorney General ordered the forensic doctor to examine and examine the person who shows signs of mental impairment.

-The medical certificate of work accidents: The forensic doctor determines the extent of the employer's responsibility and the person's eligibility for compensation from the "Social Security Fund."

### 3.2 the forensic medical report

It is a written medical certificate related to judicial facts that deal with the incident's causes, circumstances, and results. It is distinguished from the certificate in that it is only issued by a forensic doctor and a previous assignment and must be deep and more detailed.

**First:** The formal conditions of the report.

The report must include the name of the institution in which the doctor works, a statement of his rank, name, surname, and position, in addition to the case number and date, the assigned judge, the judicial authority to which he belongs, the name and surname of the person concerned in the report, the number of the report, the date it was written, the signature of the doctor, and the seal of the institution to which it belongs.

**Second:** The objective conditions of the report

In order for the expertise to be approved, it must include the following data:

-Preamble: Statement of the forced labor, its number, and date, if it was an order or a ruling, with the name of the judge and clarification of the points assigned to him, such as determining the date of death, the degree of injury,

the -Recalling the facts: a statement of the circumstances of the incident and how to evacuate the injured based on the information due from the victim or his companions and based on the assignment document.

-Inspections and examinations: by describing the state of the places in the event of the expert's movement and describing the objects and the appearance of the injured or the corpse.

As for the external examination (Hakobyan., 2007, p. 35), it is done by examining the various parts of the body, such as the head, limbs, torso, and bones, with the recording of wounds and injuries, their size and location, and if the particular examination is related to the external examination is related to a corpse, the expert's work is called "exhuming the corpse."The following elements are indicated in it: Changes of the corpse, identity such as race, sex, age, stature, specific signs, description of the corpse's clothes, traces on its body and its contaminated spots, visible signs of suffocation,

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external injuries and wounds on all body parts, indicating their size, depth, and location.

As for the internal examination (Hakobyan., 2007, p. 38), it is known as the dissection of the corpse (Pinheiro, p. 01) And the examination of its internal parts after opening it to take samples from it. The dissection of corpses began in the thirteenth century at the University of Bologna in Italy by the anatomy surgeon Saliceto (Pinheiro, p. 02).

Anatomy was limited only to animal dissection in the fourth century B.C. in Babylon because scientists believed at that time that the dead human body was considered sacred. Dissection was not allowed in ancient Asia for religio (The M. Choo, 2012, p. 02).

The psychological examination determines the extent to which a person has the mental powers to determine responsibility.

-Discussion: explaining the relationship between weapons and facts and discussing them with the extent to which they relate to physical and psychological damage and their compatibility with testimonies and circumstances of the crime.

-Conclusion and results: It includes the answer to the question posed by the judge about the technical points for which the doctor was ridiculed.

-Fees for medical expertise: These fees may be determined in advance by the judge, and the expert may request an amount more than the amount specified in the assignment of expertise if his work requires expenses from those specified in the order.

### **4. the definition of death and its signs**

#### **4.1 definition of death**

A person is considered dead if it is no longer possible to resuscitate him because his soul has departed from his body, and some define him as the end of life because the respiratory system, blood circulation, and nervous system have entirely stopped. (Law, 1986), and we differentiate here between the death of a person and the death of tissues because a person may die, but his tissues remain alive for up to two hours in some cases, viscera or tissues, and some rely on brain death as a sign that leaves no room for doubt, including the American Court of Cassation (Law, 1986, p. 05).

The United States of America issued a unified death law called the "Unified Definition of Death" law in cooperation between the American Medical Association and the Bar Association, where death was defined as "either irreversible cessation of circulatory or respiratory functions, or irreversible



cessation of the entire brain," including the brainstem." (Robinson, ,2016-2017, pp. 03-04).

## 4.2 Signs of Death

A group knows a person's death of signs, namely:

**-Cardiac arrest:** This is when the pulse stops, the heart is not heard with a stethoscope, the tip of the finger is not congested when tied, and no blood flows from the artery when it is cut. When artificial light is placed in the delicate part between the fingers of the hand, this part appears dark, while it appears red if the person is alive.

**-Respiratory cessation:** This is known as abdominal and chest movements, the exit of air, and the inability to hear air; the mirror or the shiny metal object, such as the cover of the watch cover, should not be darkened when placed in front of the mouth or nose, or a feather should not move. It is not said that a person has died except after the heart and breathing stop together (Law, 1986, p. 02) for at least five minutes because one of them may stop.

**-Loss of eye luster:** This is due to the formation of a light layer of mucus on it, and this may be delayed if the eyes are closed immediately after death, and the eyes may lose their luster during life due to disease.

## 5. is signs of body change

It is a set of signs through which the expert can determine the cause of death:

### 5.1 the coldness of the body:

The average temperature of the body is usually between 36 and 37.2, taken from the mouth (Loftus, 2008, p. 57), and after death, the temperature gradually loses to reach room temperature within 12 to 18 hours, and the body usually loses a degree and a half every hour in the hours of the first six. It loses its degree every six hours until it reaches the air temperature.

The body begins to cool gradually, as the hands, feet, and face cool after death, and the whole body cools afterward. The speed of cooling varies from one person to another (Maio, 2001, p. 416) and is controlled by the following factors:

**-The state of the corpse:** the more obese a person is, his temperature slowly (Maio, 2001, p. 430) decreases because the fatty substance on his skin maintains the temperature inside the body.

**-The whereabouts of the corpse:** Cold air currents are among the factors that speed up the coldness, and the corpse cools in the water faster, and the colder the water, the faster it cools (Maio, 2001, p. 401).

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**-Cause of death:** In the case of lightning strikes and suffocation, the corpse retains its temperature, and the corpse's temperature may rise after death if it results from a microbial condition, such as some cases of cholera, due to the multiplication of microbes. It may also rise in cases of acute rheumatism or nervous system injuries.

Knowing the body temperature does not help much in giving the exact moment of death due to the abovementioned factors. Because the body temperature is not known before death, the time is approximate, and forensic doctors use the following equation: Time of death =  $37 - \text{body temperature} + 3$ .

### 5.2 Cadaveric cyanosis

Or cadaveric deposition, or cadaveric cyanosis, occurs due to the gathering of the lower veins in the body because of their vulnerability to gravity due to the lack of blood circulation, and in addition to the aneurysm of the vessels due to the relaxation of its muscles, and the cyanosis increases in those who die suddenly. At the same time, they are full of the body (Hakobyan., 2007, p. 64). And decreases in the case of death due to bleeding, and this is due to the amount of blood present in the body, its color is red-violet in the case of natural death, and in the case of poisoning, it is of rose color, and in the case of suffocation, it is pink. And that the place of deposition indicates the corpse's position before and after death and explains how to move the corpse from its place, as the deposition spots do not change their color if they are moved from their place.

It helps to know the time of death, as it appears in small spots half an hour after death, which begins to expand until they reach each other after five to six hours. After 10 to 12 hours, cyanosis pervades the entire body area, depending on the corpse's position at the bottom.

### 5.3 stiffness

It begins two hours after the person's death due to the hardening of the muscles in the form of mild stiffness in the eyelids and the upper and lower extremities.

Stiffness occurs due to the muscles' resistance to death, and clinic acid is formed in interaction with the articular seismic materials, (Hakobyan., 2007, p. 58).

Which immobilizes them. Moreover, if we consider stiffness as a defense of muscles against death, their defense against stiffness increases for longer whenever the muscles are healthy. Therefore, we find that the stressed ones before death begin faster, last for a short time, and are weak. As for children

and the elderly, the stiffness appears faster and weaker. In addition, the weather's heat accelerates rigor and makes it weak, while the cold delays and makes it long. The importance of stiffness is shown in the following:

It helps in knowing the time since death and the corpse's position at the time of death and after it. It also indicates the type of death, which starts early in the case of exhaustion and fatigue due to the decomposition of frozen albuminous materials.

#### **5.4 Rot** (Hakobyan., 2007, pp. 62-68)

It is the decomposition of tissues under the influence of microbes and usually begins after 24 hours in normal conditions and may be prolonged in the winter season.

It begins as green at the level of the abdomen, then extends to the chest and the rest of the body. In the case of drowning, rotting begins in the head, neck, and upper chest, given that they are the parts most filled with blood.

The rot starts from the standard color to the largest, then blue-violet, then black, and does not include the corpse at once, as you may find several colors in one corpse.

The rate of rotting is controlled by several factors, including:

**-Temperature:** At less than 10 degrees, the growth of germs responsible for decomposition stops, and the most suitable temperature for germs to multiply is between 30 degrees and 37 degrees, so decomposition is faster in summer than winter.

**-Air:** The germs responsible for decomposition live in the air. A body exposed to air rots eight times faster than a body buried in the soil and twice as fast as a body immersed in water.

**Humidity:** Microbes need to multiply to a certain degree of humidity. People who die gradually due to illnesses lose weight, and the moisture percentage decreases, so their bodies slowly rot.

Therefore, we may find an amputated part of the body exposed to the same conditions that the body is exposed to. Its rotting may be delayed due to a lack of moisture.

Rot is manifested in the following:

Rapid putrefaction indicates poisoning, slow putrefaction indicates bleeding, and the state of drowning differs from the beginning of putrefaction. The development of eggs of flies and insects indicates the time that has passed.

## **5. CONCLUSION**

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After explaining the importance of forensic medicine to determine the causes of murders and my knowledge of their time and how they occurred, it seems clear that the trial judges could not do without the opinion of the forensic expert, and we conclude a set of results:

-Forensic medicine requires an expert, who is the forensic doctor who directly contributes to finding the truth.

-Conducting expertise is optional for trial judges, and in return, the law gave the parties to the case the possibility of registering a request for expertise; even if this request was rejected, It must be justified following the requirements of Article 143 of the Code of Criminal Procedure.

-If the expert request is not binding about the trial judges, then it is preferable that the counter-expert procedure is non-binding, and the exact provisions of the original expert procedure apply to it as the reasoning condition, which is indicated by the provisions of Article 156 of the Code of Criminal Procedure.

-If the expert procedure is optional, then the judges of the subject matter may not interfere in the results of the expertise, such as changing the percentage of incapacity, so it is only with counter expertise.

-Resorting to experience is obligatory in the event of a technical issue.

-Conducting a counter-expertise is not only in the case of obtaining other than the first experience, but the lack of experience because the expert did not perform the tasks assigned to him may enable this, and the legislator called it complementary experience following the requirements of Article 154 of the Code of Criminal Procedures.

-The presence of the expert at the trial session is optional for the existence of the expert report. However, the parties to the litigation can summon him following the summons procedures stipulated in Article 274 of the Code of Criminal Procedures.

-It is not permissible to adhere to the defense of the invalidity of experience for the first time before the Supreme Court because it is one of the defenses that relate to the interest of the litigants and does not learn from public order.

-Experience, like any other evidence, can be taken or left.

-For the judge to ensure that the truth is reached without the intervention of an external party, we recommend relying on precise specialization in adjudicating criminal cases by training judges in crimes against persons and specialized judges in crimes against funds.

-Determining the types of evidence that must be collected from the forensic doctor according to the type of crime without referring to the assignment submitted by the court.

Lastly, I hope to have contributed effectively to studying the relationship between forensic science in homicides and the statement of truth sought by the judiciary.

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